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Claims:

1. Receiver for detecting information symbols transmitted according to an CDMA technique,
 according to which CDMA technique the information symbols are respectively spread
 10 with a common spreading code and scrambled with different scrambling codes, on the transmission side,
 the receiver comprising:
 - at least one despreading unit (44, 45) for despreading an input data bitstream respectively with said common spreading code, and
 15 - a set of k descrambling units (46, 47, 48, 49) per despreading unit (44, 45), k being an integer larger than 1, respectively k descrambling units (46, 47, 48, 49) being supplied with the output signal of one despreading unit (44, 45).
2. Receiver according to claim 1,
 20 characterized in that
 a plurality of despreading units (44, 45) is provided and input data are supplied to the despreading units (44, 45) by means of a delay line (42, 43).
3. Receiver according to ^{claim 1} ~~anyone of claims 1 or 2~~,
 25 characterized in that
 a channel estimator (15) is provided generating channel estimation values.
4. Receiver according to claim 3,
 characterized in that
 30 a correlator (16') is provided supplying correlation based data both to the input of the receiver (16) and of the channel estimator (15).

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5. Receiver according to ~~anyone of claims 3 or 4~~,^{claim 3}
characterized in that
it comprises multiplying circuits for multiplying data based on the output of a
descrambling unit (46, 47, 48, 49) with the channel estimation values supplied from the
5 channel estimator (15).

6. Receiver according to claim 5,
characterized in that
a plurality of RAKE combiner (52, 53) is provided being respectively supplied with the
10 output of n multiplying circuits (51) associated with different despreading units (44, 45)
but with descrambling units (46, 47, 48, 49) using the same descrambling code, wherein
n is the number of RAKE taps and larger than 1.

7. Receiver according to claim 6,
15 characterized in that
a number k of RAKE combiner is provided, k being the number of different scrambling
codes used per link and being larger than 1.

8. Mobile communications device,
20 characterized in that
it comprises a receiver according to ~~anyone of the preceding claims~~.^{claim 1}

9. Mobile communications device,
characterized in that
25 it is a mobile station for a CDMA transmission system.

10. Method for detecting information symbols transmitted according to an CDMA
technique,
according to which CDMA technique the information symbols are respectively spread
30 with a common spreading code and scrambled with different scrambling codes, on the
transmission side,
the method comprising the following steps:

- a set of k descrambling step (46, 47, 48, 49) per despreading step (44, 45), k being an integer larger than 1, respectively k descrambling steps (46, 47, 48, 49) being supplied with the output of one despreading step (44, 45).

a plurality of despreading steps (44, 45) is provided and input data are supplied to the despreading steps (44, 45) after having been passed through a delay line (42, 43).

a correlation step (16') for supplying correlation based data both to the receiving step (16) and to the channel estimation value generation step (15).

the step of multiplying data based on the output of a descrambling unit (46, 47, 48, 49) with the channel estimation values supplied from the channel estimation value generation step (15).

a plurality of RAKE combining steps (52, 53) respectively supplied with the output of n multiplying steps (51) associated with different despreading steps (44, 45) but with descrambling steps (46, 47, 48, 49) using the same descrambling code, wherein n is the number of RAKE taps and larger than 1.

a number k of RAKE combining steps is provided, k being the number of different scrambling codes used per link and being larger than 1.

5 scrambling codes used per link and being larger than 1.

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